## 2667. ROSMARINUS OFFICINALIS.

Rosemary.

From Ussy, France. Received through Mr. Walter T. Swingle, 1899.

A shrub native of southern Europe and north Africa. An essential oil used in perfumery is distilled from the leaves. It is readily propagated from seed or cuttings. This is famed in Europe as a bee plant and is eaten greedily by sheep. It grows on arid calcareous hills, and should be widely distributed in the warmer portions of this country.

## 2668. SAMBUCUS PYRAMIDATA.

Elder.

From Ussy, France. Received through Mr. Walter T. Swingle, 1899.

"Sureau pyramidal." An ornamental European shrub.

# 2669. SORBUS DOMESTICA.

Sorb-apple.

From Ussy, France. Received through Mr. Walter T. Swingle, 1899.

"Cormier." (See No. 2549.)

#### 2670. ELAEAGNUS MULTIFLORA.

Goumi.

From Ussy, France. Received through Mr. Walter T. Swingle, 1899.

A Japanese hardy evergreen bush bearing almost continuously an immense number of edible fruits. In Europe these are used in making preserves. The bush may be propagated from cuttings. The flowers are fragrant. It is quite ornamental, and is recomended for game preserves as food for birds.

## 2671-2677. PYRUS MALUS.

Apple.

From Ussy, France. Received through Mr. Walter T. Swingle, 1899.

A collection of French cider apples.

One of the most important cultures in Europe for introduction into America is that of the cider apples. It is very much more important in France than the culture of table apples. No less than 10,000,000 barrels of cider are produced annually. Of late the production of cider has become an exceedingly important industry in some parts of Germany, and I am perfectly certain that it has a great future in America. Professor Goethe, of the Pomological School at Geisenheim, states that the displacement of beer by cider is a great triumph for pomology in two ways: First, because cider, which can be produced by the small farmer, drives out beer, which only those with large capital can hope to brew; second, that cider drinking does not interfere with fruit eating, while beer drinking is universally considered to do so in Germany, and in consequence one almost never sees people eating fruit after beer in a German restaurant. Only those who drink wine or cider eat fruit liberally.

There are hundreds of varieties of cider apples in cultivation. Almost every village in Normandy has its own special sorts. The cider-apple trees are grafted twice. In the first place, any one of a half dozen vigorous growing sorts is grafted at the surface of the ground on the root of a seedling apple. Then the special variety of cider apple is grafted at 6 feet from the ground upon this vigorous stock. This is the almost universal practice in the culture of cider apples, and is claimed to add greatly to the vigor of the trees, besides insuring a straight and strong stem, growing high

enough to prevent cattle from browsing on the branches.

The cider apple is seldom planted in orchards, but the trees are generally set out in pastures, as it is held that their growth does not interfere with that of grasses in meadows, nor with the cultivation of small crops. It is because of the fact that they are grown in meadows that they are grafted 6 feet or more from the ground.

It should be noted that in France the cultivation of cider apples is complicated by the fact that at least three varieties of a totally different character must ripen at the same time. According to Baltet, there are practically three seasons of ripening—early, medium, and late. At each season there must be at least three varieties—one acid, one sweet, and one bitter. For example, for those ripening in the second season, "Camoise," "Rouge-Bruyere," and "Amèr-doux" may be grown. Cider made from acid sorts is said to be poor, and to turn brown on exposure; that from sweet sorts is pale and keeps poorly; that made from the bitter sorts is small in quantity and too thick. In general, the acid sorts are used to give quantity, the sweet to give quality, and the bitter to give keeping qualities.